



# A STUDY OF THE EFFECTIVENESS OF CONCEPT ATTAINMENT MODEL OVER CONVENTIONAL TEACHING METHOD FOR TEACHING HOME SCIENCE AT SECONDARY LEVEL

Prof. Vandana Goswami<sup>1</sup> | Sushma Verma<sup>2</sup>

## ABSTRACT

Concept attainment model as an approach to teaching is concerned with the concept formation and concept attainment. Concept attainment is a process of finding out defining attributes of a given category. Concept attainment model helps to clarify ideas. It engages students in formulating a concept through the use of examples and non examples. Keeping in view the importance of Concept attainment model in the teaching- learning process, a study was conducted to determine the comparative effectiveness of concept attainment model over conventional teaching methods for teaching Home Science at secondary level. The study was conducted on class 9th students by using experimental method. The sample of the study comprised to 488 class 9th students. Simple random sampling technique was used to collect data. 244 students were selected randomly to form an experimental group. Another 244 students were selected randomly to form the control group for the study. The experimental group was taught through concept attainment model and the control group was taught by using conventional methods of teaching after completion of teaching, a self constructed achievement test was administered. For drawing the result, t-test was used. The results showed that there existed significant difference between the pre-test and post-test achievement scores of the students taught through concept attainment model of teaching as well as conventional teaching methods. The significant difference was found between the post-test mean achievement scores of the students taught through concept attainment model and conventional teaching methods.

Education is a tri-polar process in which teacher student and curriculum are the three poles. The process of teaching and learning is complex one. The process of teaching and learning is planned by teacher for the objective of better learning of the students. Effective teaching if possible only when the teacher has knowledge and skill of using proper instructional modes. The teaching- learning process is the important that influences directly the achievement of the students. The effective teaching strategy helps the students to attain the educational objectives in a better way.

Joyce and Weil (1992) have searched and researched on a variety of strategies developed by different learning theories and related principles and designed a number of models of teaching. Concept attainment model (CAM) was developed from the work of Bruner and his Associates Bruner stated that the role of teacher is to create situation in which students can learn on their own rather than to provide packaged information to students.

## OBJECTIVES:

The objectives of the study were:

1. To compare the pre- test scores of experimental and control groups.
2. To find out the instructional effect of concept attainment model of teaching based on immediate testing.
3. To find out the instructional effect of conventional methods of teaching based on immediate testing.
4. To find out the comparative effectiveness of concept attainment model and conventional teaching methods of Home Science at secondary level observed immediately.

## HYPOTHESIS:

The hypothesis of the study were:

1. The pre- test scores of experimental and control groups do not differ significantly.
2. The pre- test and post- test achievement scores of the students taught through concept attainment model do not differ significantly.
3. The pre- test and post- test achievement scores of the students taught through conventional methods of teaching do not differ significantly.
4. The post- test achievement scores of the students taught through concept attainment model and conventional teaching methods do not differ significantly.

## METHODOLOGY:

The present study is aimed to find out the comparative effectiveness of concept attainment model of teaching over conventional methods of teaching home science at secondary level. Thus the study is experimental in nature. The investigator applied randomised groups pre- test post- test design.

## Sample:

The sample consisted 488 class 9th students of which 244 formed the experimental group whereas 244 students formed the control group using random assignment.

## Tools:

The following tools were used:

- Lesson transcripts based on concept attainment model of instruction.
- Lesson transcripts based on conventional teaching methods.
- Achievement test in home science.

## ANALYSIS AND FINDINGS:

Table 1 shows the comparison of pre- test achievement scores of the experimental and control groups

**TABLE-1**  
**Pre- test achievement scores of the experimental and control groups**

Group	N	Mean	S.D.	Critical Ratio (C.R.)	Result
Experimental (CAM) Group	244	11.86	8.46	0.71	Insignificant at the significance level of 0.05
Control (TTM) Group	244	12.41	8.63		

Table-1 shows that there is no significant difference between the pre-test mean achievement scores of the experimental and control groups at 0.05 level. This indicates that both groups do not vary significantly in the initial academic ability of the students.

Table- 2 shows the comparison of the pre- test and post- test achievement scores of the experimental group

**TABLE-2**  
**Pre- test and post- test achievement scores of the experimental group.**

Group	N	Mean	S.D.	Critical Ratio (C.R.)	Result
Pre-test (CAM) Group	244	11.86	8.46	35.83	Significant at the significance level of 0.05
Post-test (CAM) Group	244	38.38	7.98		

Table 3 shows that the pre- test and post- test mean achievement scores of the students taught through conventional teaching methods differ significantly at 0.05 level of significance.

**CONCLUSION:**

In the present study, an attempt was made to explore the effectiveness of concept attainment model of teaching over conventional teaching methods for teaching Home Science at secondary level. There was found significant difference between the pre- test and post- test achievement scores of the students taught through concept attainment model and conventional teaching methods. Achievement level of the students in Home Science taught through concept attainment model of teaching was found to be higher than the achievement level of students taught through conventional teaching methods. Concept attainment model provides a chance to analyse the students' thinking process and to help them develop more effective strategies for thinking and concept attainment.